

CLAIMS:

1. An electrodynamic loudspeaker comprising a chassis, a movable body flexibly connected to the chassis and having a three-dimensional diaphragm with a base part and a top part which is wider than the base part, and an electromagnetic actuator for moving said body with respect to the chassis along a translation axis extending between said two parts of the diaphragm, which actuator comprises a stationary actuator part secured to the chassis and a translatable actuator part, which latter actuator part extends inside a space enveloped by the contours of the diaphragm and is translatable along the translation axis with respect to the stationary actuator part and is connected to the movable body in the region of the base part of the diaphragm, said actuator parts being capable of magnetically co-operating with each other across an air gap, wherein the movable body comprises, in the proximity of the base part of the diaphragm, a bridging element which is secured to the movable part of the actuator and extends radially with respect to the translation axis, the diaphragm and the bridging element being interconnected at least at a radial distance to the translatable part of the actuator.
2. A loudspeaker as claimed in claim 1, wherein the bridging element is designed such that it functions as a cooling element during operation.
3. A loudspeaker as claimed in claim 1 or 2, wherein the bridging element is a thermally conductive disc-shaped element.
4. A loudspeaker as claimed in claim 1, wherein the stationary actuator part comprises a magnetic structure and the translatable actuator part comprises a magnetic coil, said magnetic coil extending into the air gap.
5. A loudspeaker as claimed in claim 3, wherein the disc-shaped element is provided with at least one tuning opening.
6. A loudspeaker as claimed in claim 2, wherein the cooling element has an anodized cooling surface.

7. A loudspeaker as claimed in claim 1, wherein a first flexible connecting means is present proximate to the top part of the diaphragm and a second flexible connecting means is present proximate to the base part of the diaphragm for movably supporting the translatable
5 body with respect to the chassis, and wherein the first flexible connecting means is fixed to the chassis and the diaphragm and the second flexible connecting means is fixed to the chassis and the bridging element.

8. A loudspeaker unit comprising the loudspeaker as claimed in any one of the
10 preceding claims and comprising a housing accommodating the loudspeaker.